

WHAT IS CLAIMED IS:

1. A graphic data conversion method in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment, comprising the

5 step of:

generating graphic data which represents the whole original graphic form in such a way as to unify graphic data whose region is divided among said CAD data,

10 generating graphic data for said fault inspection equipment from said unified graphic data in such a way as to match a division-region which is determined by a file format for said fault inspection equipment.

2. A graphic data conversion method in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment, comprising the

5 steps of:

generating graphic data which represents the whole original graphic form, in such a way as to unify graphic data whose region is divided among said CAD data; and

10 generating graphic data for said fault inspection equipment from said generated graphic data in such a way as to match an extended division-region while setting said extended division-region on the larger side than a division-region which is determined by a file format of said fault inspection equipment.

3. A graphic data conversion method in which CAD data

for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment, comprising the

5 steps of:

generating graphic data which represents the whole original graphic form in such a way as to unify graphic data whose region is divided among said CAD data;

10 setting an extended-division region on the larger side than a division-region which is determined by a file format of a fault inspection equipment;

dividing said generated graphic data at said extended division-region; and

15 redefining divided polygon graphic data within said extended division-region as quadrilateral collection.

4. A graphic data conversion method in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment, comprising the

5 steps of:

generating graphic data of a repetitive pattern containing the whole repetitions in such a way as to unify the repetitive pattern of graphic data whose region is divided among said CAD data; and

10 generating graphic data of the repetitive pattern for said fault inspection equipment from the graphic data in such a way as to match a division-region which is determined by a file format of said fault inspection equipment.

5. A graphic data conversion method in which CAD data

for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment, comprising the steps of:

generating graphic data of a repetitive pattern containing the whole repetitions in such a way as to unify the repetitive pattern of graphic data whose region is divided among said CAD data; and

- 10 generating graphic data of the repetitive pattern for said fault inspection equipment from said generated graphic data in such a way as to match an extended division-region while setting said extended division-region on the larger side than a division-region which is determined by a file format of said fault inspection equipment.

6. A graphic data conversion method in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment, comprising the steps of:

generating graphic data of a repetitive pattern containing the whole repetitions in such a way as to unify the repetitive pattern of graphic data whose region is divided among said CAD data;

- 10 generating graphic data of the repetitive pattern for said fault inspection equipment from said generated graphic data in such a way as to match an extended division-region while setting said extended division-region on the larger side than a division-region which is determined by a file format

15 of said fault inspection equipment;

judging existence of said extended division-region that has graphic data of a common repetitive pattern;

20 registering graphic data of repetitive pattern as the graphic data of said extended division-region when extended division-region which has the graphic data of said common repetitive pattern does not exist, while when the extended division-region which has the graphic data of said common repetitive region already exists, a storage-destination of the graphic data of said common repetitive pattern is made
25 to register in spite of the graphic data of said repetitive pattern.

7. A graphic data conversion apparatus in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment comprising:

5 CAD data read-in means for inputting the CAD data;

graphic form unification means for generating graphic data which represents the whole original graphic form in such a way as to unify the graphic data whose region is divided among said CAD data;

10 graphic form division means for generating graphic data for said fault inspection equipment from the graphic data unified by said graphic form unification means in such a way as to match a division-region which is determined by a file format for the fault inspection equipment; and

15 data output means for outputting the graphic data divided by said graphic form division means to either said fault

inspection equipment or data storage means.

8. A graphic data conversion apparatus in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment comprising:

- 5 CAD data read-in means for inputting the CAD data;
- graphic form unification means for generating graphic data which represents the whole original graphic form in such a way as to unify the graphic data whose region is divided among said CAD data;
- 10 frame setting means for setting an extended division-region on the larger side than a division-region which is determined by a file format of said fault inspection equipment;
- graphic form division means for generating graphic data
- 15 for said fault inspection equipment from the graphic data unified by said graphic form unification means in such a way as to match said extended division-region; and
- data output means for outputting the graphic data divided by said graphic form division means to either said fault
- 20 inspection equipment or data storage means.

9. A graphic data conversion apparatus in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment comprising:

- 5 CAD data read-in means for inputting the CAD data;
- graphic form unification means for generating graphic data which represents the whole original graphic form in such

a way as to unify the graphic data whose region is divided among said CAD data;

10 frame setting means for setting an extended division-region on the larger side than a division-region which is determined by a file format of said fault inspection equipment;

15 graphic form division means for dividing the graphic data unified by said graphic form unification means at said extended division-region;

20 polygon division means for dividing graphic data of polygon within the extended division-region which is divided by said graphic form division means into quadrilateral collection; and

 data output means for outputting the graphic data divided by said polygon division means to either said fault inspection equipment or data storage means.

10. A graphic data conversion apparatus in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment comprising:

5 CAD data read-in means for inputting the CAD data;

 repetitive region unification means for generating graphic data of a repetitive pattern containing the whole repetitions in such a way as to unify the repetitive pattern of the graphic data whose region is divided among said CAD data;

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 repetitive region division means for generating graphic data of repetitive pattern for said fault inspection equipment

from the graphic data generated by said repetitive region unification means in such a way as to match a division-region which is determined by a file format for the fault inspection equipment; and

data output means for outputting the graphic data of the repetitive pattern generated by said repetitive region division means to either said fault inspection equipment or data storage means.

11. A graphic data conversion apparatus in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment comprising:

CAD data read-in means for inputting the CAD data;

repetitive region unification means for generating graphic data of a repetitive pattern containing the whole repetitions in such a way as to unify the repetitive pattern of the graphic data whose region is divided among said CAD data;

frame setting means for setting an extended division-region on the larger side than a division-region which is determined by a file format of said fault inspection equipment;

repetitive region division means for generating graphic data of repetitive pattern for said fault inspection equipment from the graphic data generated by said repetitive region unification means in such a way as to match said extended division-region which is set by said frame setting means; and

data output means for outputting the graphic data of

the repetitive pattern generated by said repetitive region division means to either said fault inspection equipment or data storage means.

12. A graphic data conversion apparatus in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment comprising:

5 CAD data read-in means for inputting the CAD data;

repetitive region unification means for generating graphic data of a repetitive pattern containing the whole repetitions in such a way as to unify the repetitive pattern of the graphic data whose region is divided among said CAD data;

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frame setting means for setting an extended division-region on the larger side than a division-region which is determined by a file format of said fault inspection equipment;

15 repetitive region division means for generating graphic data of repetitive pattern for said fault inspection equipment from the graphic data generated by said repetitive region unification means in such a way as to match said extended division-region which is set by said frame setting means;

20 interframe repetitive information registration means for judging existence of the extended division-region which has the graphic data of the common repetitive pattern, in cases where there does not exist said extended division-region which has graphic data of common repetitive pattern, said graphic data of the repetitive pattern is made to register as the graphic

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data of the extended division-region concerned;

reference template setting means for registering storage-destination of graphic data of common repetitive pattern in stead of graphic data of repetitive pattern when
 30 said interframe repetitive information registration means judges that the extended division-region already exists, that has the graphic data of common repetitive pattern; and

data output means for outputting the data set by said interframe repetitive information registration means and said
 35 reference template setting means to either said fault inspection equipment or data storage means.

13. A graphic data conversion apparatus in which CAD data for a graphic form drawing equipment that is formed in such a way as to divide a region of data is made to convert into graphic data for a fault inspection equipment comprising:

5 CAD data read-in means for inputting the CAD data;

graphic form unification means for generating graphic data which represents the whole original graphic form in such a way as to unify the graphic data whose region is divided among said CAD data;

10 repetitive region unification means for generating graphic data of a repetitive pattern containing the whole repetitions in such a way as to unify the repetitive pattern of the graphic data whose region is divided among said CAD data;

15 frame setting means for setting an extended division-region on the larger side than a division-region which is determined by a file format of said fault inspection

equipment;

graphic form division means for dividing the graphic data unified by said graphic form unification means at said extended division-region;

25 polygon division means for dividing graphic data of polygon within the extended division-region which is divided by said graphic form division means into quadrilateral collection;

repetitive region division means for generating graphic data of repetitive pattern for said fault inspection equipment from the graphic data generated by said repetitive region unification means in such a way as to match said extended division-region which is set by said frame setting means;

30 interframe repetitive information registration means for judging existence of the extended division-region which has the graphic data of the common repetitive pattern, in cases where there does not exist said extended division-region which has graphic data of common repetitive pattern, said graphic data of the repetitive pattern is made to register as the graphic data of the extended division-region concerned;

reference template setting means for registering storage-destination of graphic data of common repetitive pattern in stead of graphic data of repetitive pattern when said interframe repetitive information registration means judges that the extended division-region already exists, that has the graphic data of common repetitive pattern; and

data output means for outputting the graphic data divided by said polygon division means and the data set by said

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interframe repetitive information registration means and said reference template setting means to either said fault inspection equipment or data storage means.